MILNE POINT UNIT

APPLICATION FOR THE EXPANSION OF THE UNIT AREA AND NINTH REVISION OF THE KUPARUK PARTICIPATING AREA

DECISION AND FINDINGS OF THE COMMISSIONER
ALASKA DEPARTMENT OF NATURAL RESOURCES

FEBRUARY 5, 1998

MILNE POINT UNIT

EXPANSION OF THE UNIT AREA AND NINTH REVISION
OF THE KUPARUK PARTICIPATING AREA

I. INTRODUCTION AND BACKGROUND

BP Exploration (Alaska), Inc. (BP), as Milne Point Unit Operator, applied to expand the Milne Point Unit (MPU) and the MPU Kuparuk Participating Area (KPA). The unit expansion proposes to add approximately 12,677 acres. The acreage surrounds the two Cascade wells, drilled and completed by BP in February and March of 1993, and two H-Pad wells (MPH-05 and MPH-06) that were drilled and completed in 1995-96. BP provided geological and engineering data for the proposed unit expansion to include all or part of the potential hydrocarbon accumulations within the Kuparuk River Formation. The proposed MPU KPA expansion will add approximately 3,642 acres that encompass part of the newly expanded unit acreage around the Cascade and MPH-05 and MPH-06 wells and three 40-acre tracts to the south and west of MPE-14. The geological, well, and production data that BP submitted justifies the expansion of the Kuparuk River Participating Area within this portion of the Milne Point Unit. The data indicate that the Kuparuk River Formation is capable of producing or contributing to the production of hydrocarbons in paying quantities.

The Division approves the expansion of the MPU subject to the leases being included in a participating area within five years of the effective date of this unit expansion. If the leases or portions of the leases are not included in a participating area within five years of the effective date, those leases or portions of the leases will be automatically eliminated from the MPU.

The division approves BP's application to revise the KPA. The KPA revision is limited to the area that is "reasonably known to be underlain by hydrocarbons and known or reasonably estimated ...to be capable of producing or contributing to production of hydrocarbons in paying quantities." 11 AAC 83.351(a). If additional data are obtained or submitted in the future, the boundaries of the KPA may be revised. The division also approves the Exhibit C to the MPU Agreement (Tract Allocation Schedule), dated January 26, 1998 (Attachment 2 to this Decision and Findings). The effective date of the unit expansion, Ninth KPA revision and the Exhibit C is November 1, 1996.

II. APPLICATION FOR THE EXPANSION OF THE UNIT AREA AND NINTH REVISION OF THE KUPARUK PARTICIPATING AREA

BP applied to expand the MPU and the existing KPA on August 8, 1997. The proposed expansion of the MPU would add five state oil and gas leases, ADL 380109 (Tract 23), ADL 380110 (Tract 24), ADL 375133 (Tract 25), ADL 375132 (Tract 26), and ADL 28232 (Tract 27), totaling approximately 12,677 acres, to the MPU. The expanded MPU contains approximately 66,270 acres.

Two leases, ADLs 375132 and 375133, were acquired in state Lease Sale No.70A (Kuparuk

Uplands: Canning R. to Colville R), held on January 29, 1991. These leases were issued on state lease form DNR 10-4037 (Rev. 9/90) effective April 1, 1991 for a term of 10 years. The leases provide for a 12.5 percent royalty to the state. The Cascade #1 Well is located on ADL 375133. This well was certified by the division as capable of producing oil and gas in paying quantities on August 5, 1994.

Two leases, ADLs 380109 and 380110, were acquired in state Lease Sale No.75 (Kuparuk Uplands: between NPRA and the Sag R.; ASRC lands in the Colville R. Delta), held on December 8, 1992. The leases were issued on state lease form #DOG 9208 effective February 1, 1992 for a term of 10 years. The leases provide for a 12.5 percent royalty to the state.

The fifth lease, ADL 28232, was acquired in state Lease Sale No.14 (Prudhoe West to Canning R.; offshore/uplands), held on July 14, 1965. The lease was originally issued on state lease form DL-1 (Revised Oct. 1963) effective October 1, 1965. This lease was conditional until the state received title to the lands from the federal government on January 29, 1991. With the receipt of patent to ADL 28232, the 10 year primary term of the lease is January 29, 1991 through January 29, 2001. The lease reserves a 12.5 percent royalty to the state.

Simultaneously with the application to expand the MPU, BP applied to expand the existing KPA within the existing and expanded MPU. The proposed KPA expansion acreage encompasses the Kuparuk Reservoir within the Kuparuk River Formation, which is capable of producing or contributing to the production of hydrocarbons in paying quantities. The portions of leases proposed for inclusion in the Ninth KPA Revision and the proposed tract allocation schedule for all the leases in the KPA (Exhibit C to the MPU Agreement) are listed in Attachment 1 and 2 respectively to this Decision and Findings. The royalty share from the MPU KPA is free and clear of all lease and unit expenses.

There is geologic evidence to support expansion of the KPA to develop the Kuparuk River Formation reservoirs within the MPU under a unified plan of development. BP conducted Tract Operations on Tracts 25, 26, and 27 to evaluate the further extent of the Kuparuk River Formation. BP constructed the new MPU K-Pad in January 1996. Production from K-Pad began in August 1996 at initial rates of 12,000 BOPD. K-Pad production now averages around 6,000 BOPD from eight Kuparuk reservoir producers. BP also drilled wells from MPU E-Pad and H-Pad in the portions of other tracts identified for the KPA expansion.

On September 12, 1997, the division received the filing fee required under 11 AAC 05.010(a)(10)(E), amendments to the MPU Operating Agreement for the inclusion of the expansion leases, and additional geological information supporting the unit and participating area expansion. BP's application became complete under 11 AAC 83.306. On September 21, 1997, public notice was published in the Anchorage Daily News and in the Fairbanks Daily News Miner, as required by 11 AAC 83.311. Copies of the public notice were provided to interested parties in compliance with 11 AAC 83.311. These parties included the City of Barrow, the North Slope Borough, the Arctic Slope Regional Corporation, the Alaska Department of Environmental Conservation, the Alaska Department of Fish and Game, the Alaska Department of Natural Resources, Division of Land, and the Alaska Oil and Gas Conservation Commission (AOGCC).

The public notices invited interested parties and members of the public to submit comments by October 21, 1997. No comments were received from the public, interested parties, or state or local agencies.

III. DISCUSSION OF DECISION CRITERIA

The commissioner may approve expansion of a unit area if it is determined that expansion is "necessary or advisable to protect the public interest." AS 38.05.180(p) and 11 AAC 83.303(c). Approval of BP's application must be based on the criteria in 11 AAC 83.303(a) and the factors enumerated in 11 AAC 83.303(b).

The commissioner will approve a proposed expansion of a unit area, a proposed expansion of a PA, or a proposed production or cost allocation formula if the commissioner finds that each requested approval is necessary or advisable to protect the public interest. AS 38.05.180(p). To find that any or all of the requested approvals are necessary or advisable to protect the public interest, the commissioner must find that the requested approvals will: (1) promote the conservation of all natural resources; (2) promote the prevention of economic and physical waste; and (3) provide for the protection of all parties of interest, including the state. 11 AAC 83.303(a). The commissioner must consider: (1) the environmental costs and benefits; (2) the geological and engineering characteristics of the potential hydrocarbon accumulation or reservoir(s) proposed for inclusion in the participating area; (3) prior exploration activities in the proposed participating area; (4) the applicant's plans for exploration or development of the proposed participating area; (5) the economic costs and benefits to the state; and (6) any other relevant factors (including mitigation measures) the commissioner determines necessary or advisable to protect the public interest. 11 AAC 83.303(b).

A PA may include only land reasonably known to be underlain by hydrocarbons and known or reasonably estimated through use of geological, geophysical, or engineering data to be capable of producing or contributing to the production of hydrocarbons in paying quantities. 11 AAC 83.351(a). "Paying quantities" means:

> quantities sufficient to yield a return in excess of operating costs, even if drilling and equipment costs may never be repaid and the undertaking as a whole may ultimately result in a loss; quantities are insufficient to yield a return in excess of operating costs unless those quantities, not considering the costs of transportation and marketing, will produce sufficient revenue to induce a prudent operator to produce those quantities.

11 AAC 83.395(4).

(A) Promote the Conservation of All Natural Resources.

The unitization of oil and gas reservoirs and the formation of PAs within unit areas to develop hydrocarbon-bearing reservoirs is a well accepted means of hydrocarbon conservation. Without unitization, the unregulated development of reservoirs tends to be a race for possession by competitive operators. The results can be: (1) overly dense drilling, especially along property lines;

(2) rapid dissipation of reservoir pressure; and (3) irregular advance of displacing fluids. These all contribute to the loss of ultimate recovery or economic waste. The proliferation of surface activity; duplication of production, gathering, and processing facilities; and haste to get oil to the surface also increase the likelihood of environmental damage (such as spills and other surface impacts). Requiring lessees to comply with conservation orders and field rules issued by the AOGCC would mitigate some of these impacts without an agreement to unitize operations. Unitization, however, provides a practical and efficient method for maximizing oil and gas recovery, and minimizes negative impacts on other resources.

The expansion of the MPU and the expansion of the KPA to encompass additional lands overlying the Kuparuk River Formation reservoirs will allow this area to be comprehensively and efficiently explored and developed. Adoption of an operating agreement and plan of development governing that production will help avoid unnecessary duplication of development efforts on and beneath the surface.

Producing hydrocarbon liquids from the expanded KPA through the existing MPU production and processing facilities generally reduces the incremental environmental impact of the additional production. Using the existing facilities, gravel pads and roads, and infrastructure reduces the need for new ones. Oil and gas resources in the areas can be accessed from existing MPU facilities, which will allow for the development of more marginal portions of the reservoir.

(B) The Prevention of Economic and Physical Waste

Traditionally, under unitized operations, the assignment of undivided equity interests in the oil and gas reservoirs to each lease largely resolves the tension between lessees to compete for their share of production. Economic and physical waste, however, could still occur without an equitable cost sharing formula, and a well-designed and coordinated development plan. Consequently, unitization must equitably divide costs and production, and plan to maximize physical and economic recovery from any reservoir. It must also treat the royalty owner fairly.

An equitable allocation of hydrocarbon shares among the WIOs discourages hasty or unnecessary surface development. Similarly, an equitable cost-sharing agreement promotes efficient development of reservoirs and common surface facilities and encompasses rational operating strategies. Such an agreement further allows the WIOs to decide well spacing requirements; scheduling, reinjection and reservoir management strategies; and the proper common, joint-use surface facilities. Unitization prevents economic and physical waste by eliminating redundant expenditures for a given level of production, and avoiding loss of ultimate recovery by adopting a unified reservoir management plan.

Unitized operations greatly improve development of reservoirs beneath leases that may have variable productivity. Marginally economic reserves, which otherwise would not be produced on a lease by lease basis, often can be produced through unitized operations in combination with more productive leases. Facility consolidation saves capital and promotes better reservoir management by all WIOs. Pressure maintenance and secondary recovery procedures are much more predictable and attainable through joint, unitized efforts than would otherwise be possible. In combination, these factors allow

less profitable areas of a reservoir to be developed and produced in the interest of all parties, including the state.

The lessees in the proposed unit and PA expansion leases have signed the MPU Agreement and the MPU Operating Agreement, and will share the existing MPU production capacity and the MPU infrastructure. Using this infrastructure and facilities eliminates the need to construct stand-alone facilities to process the volume of recoverable hydrocarbons from the proposed unit and PA expansion area, the so-called Cascade Development area.

Facility consolidation will save capital and promote better reservoir management through pressure maintenance and enhanced recovery procedures. In combination, these factors allow the Kuparuk River Formation reservoirs within the MPU to be developed and produced in the interest of all parties.

Expanding both the MPU and the KPA to include the leases that contain productive Kuparuk Formation reservoirs by allowing these areas to access existing drill pads and unit facilities prevents economic and physical waste.

(c) Protection of All Parties

The proposed expansion of the MPU and the KPA seeks to protect the economic interests of all working interest owners of the reservoirs in the expanded unit and PA, as well as the royalty owner. Combining interests and operating under the terms of the MPU Agreement and MPU Operating Agreement assures each individual working interest owner an equitable allocation of costs and revenues commensurate with the value of their lease(s).

Because hydrocarbon recovery will be maximized and additional production-based revenue will be derived from the additional KPA production, the state's economic interest is promoted. Diligent exploration under a single approved unit plan without the complications of competing leasehold interests is certainly in the state's interest. It promotes efficient evaluation and development of the state's resources, yet minimizes impacts to the area's cultural, biological, and environmental resources. Operating under the terms and conditions of the MPU Agreement, provides for accurate reporting and record keeping, royalty settlement, in kind taking, and emergency storage of oil, all of which will further the state's interest.

Finally, as a condition of including the expansion acreage within the MPU, those lands which are not entitled to be included in a participating area after 5 years from the effective date of this Decision and Findings will be automatically contracted from the MPU. This condition assures that the inclusion of the expansion lands in the unit promotes the state's interest in the evaluation and development of those lands sooner rather than later.

In reviewing the above criteria, the following factors were considered:

(1) The Environmental Costs and Benefits

As discussed above in section III (A), the sharing of the existing facilities eliminates duplication and minimizes the surface area, both onshore and offshore, altered by the additional development. Most of the reservoir developed in the proposed expanded unit and KPA is the Cascade oil and gas accumulation discovered by BP in 1993. The Cascade prospect area is adjacent to and south and east of the MPU.

The new facilities constructed to develop the Cascade prospect included a new production pad, designated K-Pad, a road connecting the new pad to existing MPU infrastructure, and pipelines between K-Pad and MPU E-Pad to carry the Cascade produced fluids. Construction of the road/pad and the surface gathering line began in January 1996 after receipt of all necessary permits from federal, state, and local agencies.

Pad locations, road and pipeline routing were considered in siting the wells to maximize access to the Cascade reservoir, while minimizing the impacts to tundra wetlands and ponds. The pad size was kept to a minimum through the use of 30 foot wellhead spacing, and the elimination of reserve pits. Road and pipeline routings were chosen to minimize surface, stream flow, and habitat impacts.

The Cascade Development Project was constructed and is maintained in an environmentally sound manner and in compliance with federal, state and local regulations. No significant additional impacts to onshore habitat or biological resources are anticipated because of the additional Kuparuk production from the expanded MPU and KPA.

(2) The Geological and Engineering Characteristics, and Prior Exploration and Development of the Proposed Expansion Area

The Milne Point Unit lies adjacent and to the northeast of the Kuparuk River Unit. The MPU produces oil from three geological formations: 1) the Upper Triassic Sag River Formation; 2) the Lower Cretaceous Kuparuk River Formation; and 3) the Upper Cretaceous Schrader Bluff Formation. The Ninth Revision to the KPA involves reservoirs contained within the Kuparuk River Formation. Within the Milne Point Unit, the Kuparuk River Formation is cut by two major bisecting fault systems; one strikes northwest-to-southeast, while the other strikes north-northeast to south-southwest. Fault throw is variable; major faults have throws in the range of 150 to 350 feet. There are numerous smaller faults in the area with throws on the order of 10 to 100 feet. The major fault blocks contain separate oil/water contacts.

The Kuparuk River Formation is subdivided into four major informal members that are designated with letters A through D. The 'A' member is the oldest and the 'D' member is the youngest. Each member is further subdivided into submembers that are designated with numbers, such as C-1 and B-7 (with one being the oldest sub unit). The 'C' and 'B' members are separated by a major unconformity, the Lower Cretaceous unconformity (LCU). The primary reservoir pay in the proposed Ninth KPA expansion comes from the C-1 and the underlying B-7 sandstone submembers.

The Ninth KPA expansion proposes to add productive Kuparuk River Formation acreage to the southeast of the existing MPU. The Ninth KPA expansion proposes to add the following acreage to the current KPA: (1) 73-forty acre tracts around K-Pad and the eastern part of E-Pad ("Cascade

area"); (2) approximately 15-forty acre tracts around H-Pad ("the H-Pad area"); and (3) 3-forty acre tracts southeast of the MPE-14 well. In total, eighteen wells have been drilled in the portions of the tracts identified as the expansion areas.

During the evaluation of the BP application, the DNR requested additional information beyond the data submitted in September 1997. In response to the DNR requests, BP submitted the following data: 1) 16 annotated tvdss well logs; 2) a top Kuparuk C-1 structure map with an outline of the Ninth KPA expansion areas; and 3) reservoir calculations and tract allocations in spreadsheet format. With the well log information, the top C-1 structure map, and available monthly well production data, BP demonstrated that the proposed Ninth KPA expansion area is known to be underlain by hydrocarbons and is reasonably estimated to be capable of producing or contributing to hydrocarbon production in paying quantities from the Kuparuk C-1 and B-7 sandstones.

The inclusion of acreage in the northwestern part of the Cascade expansion area is justified by data from MPE-17. This well contains wet B sands and oil-bearing C-1 sandstones. In the eastern part of the Cascade area, the C-1 and B-7 sandstones are wet below –7128' tvdss. Both MPK-18 and 18A contain an entirely wet B-7 sandstone section; the C-1 sandstone is oil bearing. MPK-18, with an oil/water contact of –7074' tvdss (within the C-1 sandstone) constrains the eastern limit of the Cascade area expansion.

The central and southern part of the Cascade area is constrained by data from nine wells in the vicinity of the Cascade #1 and #1A wells, drilled by BP in March of 1993. The Cascade wells encountered oil in the Kuparuk C-1 and B-7 sandstone intervals. The southern part of the Cascade area is constrained by oil/water contacts observed in MPK-33 (–7079' tvdss) and MPK-37 (–7045' tvdss) within the B-7 sandstone unit.

Data from MPK-21, drilled west of the Cascade #1A well, constrains the southwestern expansion boundary of the Cascade area. Both the C-1 and B sands are wet in this well, providing a water-up-to of –7098 for the area. MPK-21 has been converted to an injector to support MPK-37 and MPK-17 production wells to the east.

In the H-Pad area, H-06 contains a thin siderite cemented C unit and an oil bearing upper B sandstone unit. The H-05 well contains oil pay within the C-1 sands. H-06 has been converted into an injector to support the H-05 well.

The 3-forty acre expansion tracts to the southeast of MPE-14 contain some oil column in both the C-1 and B-7 sandstones. MPE-14 contains oil down to –7001' tvdss before the B sandstone shales out. An injector is planned for the first quarter of this year in the expansion tracts to provide water flood support to the MPE-14 well.

In conclusion, the geologic, geophysical and engineering data submitted by BP demonstrate that the lands proposed for the Ninth KPA expansion are reasonably known to be underlain by hydrocarbons and known or reasonably estimated to be capable of production or contributing to production of hydrocarbons in paying quantities.

(4) The Applicant's Plan for Exploration or Development for the Expansion Areas

The development-drilling phase for the Cascade prospect on Tracts 25, 26, and 27 was completed in March 1997. Eight Kuparuk reservoir producers and 1 Sag River reservoir producer are on-line. Three injection wells drilled and cased from K-Pad await completion and tie-in to the water injection system.

Further development in the H-Pad area over ADLs 380109 and 380110 is under appraisal. Currently, two Kuparuk development wells are on-line, one producer and one injector. Finally, an injection well is planned for the first quarter of 1998 in the expansion tracts around MPE-14.

(5) The Economic Costs and Benefits to the State and Other Relevant Factors

As discussed in section IV (C) above, increased production and revenues, in and of themselves and without consideration of other relevant factors, may not always be in the state's best interest.

BP submitted with the application an allocation of production and cost for all the leases in the expanded KPA As required by 11 AAC 83.371 (Attachment 2 to this Decision and Findings). The proposed tract allocation schedule distributes working interest equity among the leases according to original recoverable reserves. The basis of the tract allocation schedule, recoverable reserves, is consistent with previous revisions of the KPA that have, in the past, been acceptable to the Division for inputing tract allocations. Division staff agrees with BP's estimate of recoverable reserves from the expansion area tracts, and the Division finds BP's tract allocation methodology acceptable for allocating production and costs among the leases in the expanded KPA.

In its August 8, 1997 Application for the Ninth Revision of the MPU KPA, BP requested a September 1, 1997 effective date for the MPU expansion and the Ninth Revised KPA and the revised tract participation schedule. At a meeting held on October 28, 1997, BP and the division agreed that the MPU expansion and the Ninth Revised KPA, and the revised tract participation schedule (Attachment 2 to this Decision and Findings), would be retroactively effective to November 1, 1996.

Finally, in the August 8, 1997 application, BP requested that the proposed MPU expansion leases be committed to and included in the MPU for a period of ten years and that any leases not entitled to be in a PA at the end of ten years be eliminated automatically from the MPU. The division feels that ten years is too long a period of time without the leases being included in a PA. Five years is a more appropriate time period given that the expansion leases are now within the MPU infrastructure and portions of the leases are included in the expanded KPA. The Division is approving the proposed MPU expansion because it will result in the affected leases being developed sooner. Maintaining the leases in the unit for ten years without including them in a PA would be inconsistent with that goal.

V. FINDINGS AND DECISION

Considering the facts discussed in this document and the administrative record, I hereby make findings and impose conditions as follows:

1. In evaluating whether to approve the proposed expansion, I must determine that it is in the state's best interest to do so considering the specific facts and circumstances surrounding the application.

2. In making a determination that the proposed expansion is in the state's best interest, it is necessary to evaluate the proposal in light of the statutes, the regulations and the contractual obligations to which the state is party.

3. The expansion of the MPU and the KPA are necessary and advisable to protect the public interest. AS 38.05.180(p) and 11 AAC 83.303.

4. The available well data and development plans justify the inclusion of the proposed lands within the MPU. Under the regulations governing formation and operation of oil and gas units (11 AAC 83.301 - 11 AAC 83.395) and the terms and conditions under which these lands were leased from the State of Alaska, the following lands are to be included in the expanded MPU area:

T.12.N., R.10.E., U.M., Secs. 1, 2, 11, and 12
(ADL 380109 (Tract 23));

T.12.N., R.11.E., U.M., Secs. 5, 6, 7, and 8
(ADL 380110 (Tract 24)).

T.12.N., R.11.E., U.M., Secs. 3, 4, 9, and 10
(ADL 375133 (Tract 25));

T.12.N., R.11.E., U.M., Secs. 1, 2, 11, and 12
(ADL 375132 (Tract 26).

T.13N., R.11.E., U.M., Secs. 27, 28, 33, and 34
(ADL 28232 (Tract 27).

5. The expansion leases shall be included in the MPU for a period of five years. The leases or portion of the leases not included in a participating area within five years of the effective date of this Decision and Finding will be automatically eliminated from the MPU. If conditions warrant the continuation of the leases within the MPU after the five years, BP may apply to defer the automatic contraction of the lands from the MPU then.

6. The available well data demonstrate that a paying quantities certification is appropriate for the well(s) in the Kuparuk River Formation reservoirs within the area proposed for the Ninth KPA Revision. The data also suggest that the acreage is underlain by hydrocarbons and known and reasonably estimated to be capable of production or contributing to production in sufficient quantities to justify the expansion of the KPA within the MPU.

The available well and geological data justify the inclusion of the proposed tracts within the KPA. Under the regulations governing formation and operation of oil and gas units (11 AAC 83.301 - 11 AAC 83.395) and the terms and conditions under which these lands were leased from the State of Alaska, the following lands are to be included in the expanded KNPA Area:

T.13.N., R.11.E., U.M., Sec. 31: SW/4 NW/4
(ADL 28231 (Tract 8));

T.13.N., R.10.E., U.M., Sec. 36: E/2 NE/4
(ADL 25518 (Tract 9));

T.12.N., R.10.E., U.M., Sec. 1: E/2, Sec. 12: NE/4
(ADL 380109 (Tract 23));

T.12.N., R.11.E., U.M., Sec. 6: W/2 NW/4, W/2 SW/4, Sec. 7: NW/4 NW/4
(ADL 380110 (Tract 24));

T.12.N., R.11.E., U.M., Sec. 3: all, Sec. 4: E/2, Sec. 10: N/2 NW/4, N/2 NE/4
(ADL 375133 (Tract 25));

T.12.N., R.11.E., U.M., Sec. 1: W/2 NW/4, W/2 SW/4, Sec. 2: all,
Sec. 11: N/2 NW/4, N/2 NE/4, Sec. 12: NW/4 NW/4
(ADL 375132 (Tract 26));

T.13.N., R.11.E., U.M., Sec. 28: S/2 SW/4, Sec. 33: W/2, SE/4, S/2 NE/4,
NE/4 NE/4, Sec. 34: W/2 NW/4, NW/4 SW/4
(ADL 28232 (Tract 27)).

7. The approved expansion of the KPA encompasses the reasonably known hydrocarbon bearing portion of the Kuparuk River Formation reservoirs within the MPU that are capable of production or contributing to production in paying quantities. The KPA expansion provides for the equitable division of costs and an equitable allocation of produced hydrocarbons, and set forth a development plan designed to maximize physical and economic recovery from the reservoirs within the expanded and approved participating areas.

8. Pursuant to 11 AAC 83.371(a), the allocations of production and costs for the tracts within the KPA (Exhibit C), Attachment 2 to this Decision and Findings, are approved.

9. The production of KPA hydrocarbon liquids through the existing production and processing facilities within the MPU reduces the environmental impact of the additional production. Utilization of existing facilities will avoid unnecessary duplication of development efforts on and beneath the surface.

10. Diligent exploration and delineation of the reservoirs underlying the MPU is planned by the MPU Owners under the MPU plans of development and operation approved by the state.

11. The plan of development for the MPU expansion area meets the requirements of 11 AAC 83.303 and 11 AAC 83.343. Further plans of development which describe the status of projects undertaken and the work completed, any changes or expected changes to the plan must be submitted in accordance with 11 AAC 83.343.

12. Approval of the expansion of the MPU, expansion of the KPA, and the revised Exhibit C to the MPU Agreement (Attachment 2 to this Decision and Findings) are effective November 1, 1996.

Kenneth A. Boyd, Director
Division of Oil and Gas

5 FEB 1998
Date

Attachments: Ninth KPA Expansion Tracts
Exhibit C to MPU Agreement, Tract Allocation Schedule

MPU.exp.KPA9rev.Appv.doc

MILNE POINT UNIT
9TH KUPARUK PA REVISION
KPA Expansion Land and Lease Description

Tract #	ADL Lease #	Umiat Meridian	Sections	Acres
8	28231	T13N-R11E	Sec. 31: SW/4 NW/4	40
9	25518	T13N-R10E	Sec. 36: E/2 NE/4	80
23	380109	T12N-R10E	Sec. 1: E/2 Sec. 12: NE/4	480
24	380110	T12N-R11E	Sec. 6: W/2 NW/4, W/2 SW/4 Sec. 7: NW/4 NW/4	122
25	375133	T12N-R11E	Sec. 3: All Sec. 4: E/2 Sec. 10: N/2 NW/4, N/2 NE/4	1,120
26	375132	T12N-R11E	Sec. 1: W/2 NW/4, W/2 SW/4 Sec. 2: All Sec. 11: N/2 NW/4, N/2 NE/4 Sec. 12: NW/4 NW/4	1,000
27	28232	T13N-R11E	Sec. 27: None Sec. 28: S/2 SW/4 Sec. 33: W/2, SE/4, S/2 NE/4, NE/4 NE/4 Sec. 34: W/2 NW/4, NW/4 SW/4	800
			Total Acreage Added to MPU KPA	3,642

MILNE POINT UNIT AGREEMENT
KUPARUK PARTICIPATING AREA

PROPOSED EXHIBIT C
TRACT PARTICIPATION FACTORS

ATTACHMENT 3 TO 9TH KPA EXPANSION APPLICATION
JANUARY 22, 1998

MPU Tract #	ADL Lease #	Umiat Meridian	Acres	Sections	Tract Participation %	BPAE/BPOE Royalty %	OXY Royalty %	Net Profit Share %
2	47433	T13N-R10E	2,240	Sec. 1: S/2; Secs. 2, 11, 12	2.49034%	20.0	12.5	
3	47434	T13N-R10E	2,560	Secs. 3, 4, 9, 10	11.13767%	20.0	12.5	
4	25516	T13N-R10E	640	Sec.15	0.71715%	12.5	12.5	
4A	315848	T13N-R10E	1,280	Secs. 16, 21	2.81527%	12.5	12.5	
5	47437	T13N-R10E	2,480	Secs. 13, 14, 24 Sec. 23: N/2, SE/4, E/2 SW/4	7.93619%	20.0	12.5	
6	47438	T13N-R11E	1,424	Sec. 19 Sec. 18: W/2 W/2, NE/4 NW/4, NW/4 NE/4, E/2 SW4, S/2 SE/4 Sec. 20: SW/4, W/2 NW/4, SE/4 NW/4, W/2 SE/4, SE/4 SE/4	2.21924%	20.0	12.5	
8	28231	T13N-R11E	2,277	Secs. 29, 30 Sec. 31: NE/4, N/2 SE/4, NW4 Sec. 32: E/2, NW/4, E/2 SW/4, NW/4 SW/4	4.32405%	12.5	12.5	
9	25518	T13N-R10E	800	Sec. 25 Sec. 26: E/2 NE/4 Sec. 36: E/2 NE/4	0.54574%	12.5	12.5	
10	25509	T13N-R10E	2,262	Secs. 5, 6, 8 Sec. 7: NE/4, E/2 SE/4, E/2 NW/4, NW/4 NW/4	6.34730%	12.5	12.5	
12	25515	T13N-R10E	1,320	Secs. 17, 20 Sec. 18: NE/4 NE/4	2.24990%	12.5	12.5	
14	25906	T13N-R10E	600	Sec. 27: W/2 NW/4, NW/4 SW/4 Sec. 28: N/2, N/2 SW/4, N/2 SE/4	2.58556%	12.5	12.5	
15	355017	T14N-R10E	3,400	Secs. 29, 32, 33, 34 Sec. 27: S/2 SW/4 Sec. 28: SW/4, W/2 NW/4, SE/4 NW/4, W/2 SE/4, SE/4 SE/4 Sec. 35: SW/4, S/2 NW/4, W/2 SE/4, SE/4 SE/4	12.38937%	12.5	12.5	40
16	355018	T14N-R9E T14N-R10E	4,403	Secs. 25, 26, 35, 36 Sec. 27: E/2, E/2 SW/4, SE/4 NW/4 Sec. 34: N/2 NE/4, SE/4 NE/4, NE/4 SE/4 Secs. 30, 31	30.84272%	12.5	12.5	30
18	355021	T14N-R9E	1,080	Sec. 22: SE/4 SE/4 Sec. 23: SE/4, S/2 SW/4, NE/4 SW/4, S/2 NE/4, NE/4 NE/4 Sec. 24	3.24110%	12.5	12.5	30
19	355016	T14N-R10E	640	Sec. 19: S/2 Sec. 20: S/2	4.95941%	12.5	12.5	40
23	380109	T12N-R10E	480	Sec. 1: E/2; Sec. 12: NE/4	0.34502%	12.5	12.5	
24	380110	T12N-R11E	122	Sec. 6: W/2 NW/4, W/2 SW/4 Sec. 7: NW/4 NW/4	0.04653%	12.5	12.5	
25	375133	T12N-R11E	1,120	Sec. 3: All Sec. 4: E/2 Sec. 10: N/2 NW/4, N/2 NE/4	1.69682%	12.5	12.5	
26	375132	T12N-R11E	1,000	Sec. 1: W/2 NW/4, W/2 SW/4 Sec. 2: All Sec. 11: N/2 NW/4, N/2 NE/4 Sec. 12: NW/4 NW/4	2.03787%	12.5	12.5	
27	28232	T13N-R11E	800	Sec. 27: None Sec. 28: S/2 S/4 Sec. 33: W/2, SE/4, S/2 NE/4, NE/4 NE/4 Sec. 34: W/2 NW/4, NW/4 SW/4	1.07275%	12.5	12.5	
			30,928		100.00000%			